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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/511,777	02/24/2000	Okoziem Allen	2204/A14	5651

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EXAMINER

ENGLAND, DAVID E

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 07/20/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/511,777

Applicant(s)

ALLEN ET AL.

Examiner

David E. England

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1 – 4 and 6 – 16 are presented for examination.

***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “identifying commonality between the plurality of addresses” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
2. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “forwarding equivalence class for a routing table entry” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

Art Unit: 2143

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 8, 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The limitation of “identifying commonality between the plurality of addresses” is not disclosed in the specification.

6. The limitation of “selecting at least one regular expression character having a predetermined meaning which represents the identified commonality between the addresses”. The specification seems to state that the last number in each of the plurality of addresses could be represented by a type of character with the last number in each of the plurality of addresses being different and replacing them with the type of characters. Please clarify and/or amend.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Art Unit: 2143

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 1, 8 – 10, 13, 15 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Romanov U.S. Patent No. 6434144.

9. As per claim 1, as closely interpreted by the Examiner, Romanov teaches a method for representing a plurality of addresses in an address table in a communication system, the method comprising the steps of:

10. identifying commonality between the plurality of addresses, (e.g. col. 7, lines 8 – 55, “*bet-matching prefix*”);

11. selecting at least one regular expression character having a predetermined meaning which represents the identified commonality between the addresses, (e.g. col. 7, lines 8 – 55, “*Table 1*”);

12. generating a single address that represents the plurality of addresses by inserting the selected at least one regular expression character in place of at least one corresponding character of the plurality of addresses, thereby generating a group address, (e.g. col. 7, lines 8 – 55, “*Table 1*”); and

Art Unit: 2143

13. storing the generated group address in the address table, (e.g. col. 1, lines 35 – 55 & col. 7, line 17 – col. 8, line 16, “*prefix database*”),

14. whereby a plurality of addresses are represented by a single group address entry in the address table, (e.g. col. 1, lines 35 – 55 & col. 7, line 17 – col. 8, line 16, “*prefix database*”).

15. Referencing claim 9, Romanov teaches the storage comprises and address configuration table, (e.g. tables 1 – 8 & col. 6, line 59 – col. 7, line 22).

16. As per claim 10, Romanov teaches wherein the regular expression character defines a source address group, (e.g. tables 5 – 8 & col. 6, line 59 – col. 7, line 22).

17. As per claim 13, Romanov teaches wherein the storage comprises a routing table, (e.g. tables 5 – 8 & col. 6, line 59 – col. 7, line 22).

18. Claims 8, 15 and 16 are rejected for similar reasons as stated above.

### ***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Romanov (6434144) in view of Ankney et al. (5113499) (hereinafter Ankney).

21. As per claim 2, Romanov does not specifically teach plurality of addresses comprises at least one X.121 address. Ankney teaches plurality of addresses comprises at least one X.121 address, (e.g. col. 9, lines 6 – 30). It would have been obvious to one skilled in the art at the time of the invention to combine Ankney with Romanov because if a user needed to utilize a system that used X.121, it would be more efficient to have a diverse system with multiple addressing schemes to use in different systems that could only support X.121 network packets.

22. As per claim 3, as understood by the Examiner, Romanov and Ankney teach all that is disclosed above. Romanov also teaches said storing step includes the further step of storing the generated group address in an address configuration table, (e.g. tables 5 – 8 & col. 6, line 59 – col. 7, line 22, “*prefix database*”, & col. 8, lines 48 – 59, “*search table*”).

23. Claims 4, are rejected under 35 U.S.C. 103(a) as being unpatentable over Romanov (6434144) in view of Beser (6189102).

Art Unit: 2143

24. As per claim 4, Romanov does not specifically teach wherein the plurality of addresses comprises at least one MAC address. Beser teaches wherein the plurality of addresses comprises at least one MAC address, (e.g. col. 35, lines 6 – 32). It would have been obvious to one skilled in the art at the time of the invention to combine Beser with Romanov because it would be more versatile if the system utilized the functionality of a MAC address so a device has a physical address along with a logical address.

25. Claims 7, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Romanov (6434144) in view of Beser (6189102) in further view of Belser et al. (6151324) (hereinafter Belser).

26. As per claim 7, Romanov and Beser do not specifically teach storing the generated group address in a management information base. Romanov teaches storing the generated group address in a database as disclosed above. Belser teaches the use of a management information base, (e.g. col. 10, lines 20 – 45). It would have been obvious to one skilled in the art at the time of the invention to combine Belser with the combine system of Romanov and Beser because it allows a network manager monitor packets to ensure that transmission is successful and that devices are available in the network.

27. As per claim 14, Romanov teaches all that is described above, but does not specifically teach wherein the regular expression character defines a forwarding equivalence class for a routing table entry. Beser teaches wherein the regular expression character defines a forwarding equivalence class for a routing table entry, (e.g. col. 20,

Art Unit: 2143

lines 23 – 48 & col. 22, line 60 – col. 23, line 9). It would have been obvious to one skilled in the art at the time of the invention to combine Beser with Romanov because it would be more efficient if the system were able to forward equivalence class for a routing table entry in case of a network that would be expanded and needed to update a routing table.

28. Claim 11 is rejected for similar reasons as stated above.

29. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Romanov (6434144) in view of Peacock (6381650).

30. As per claim 6, Romanov teaches all that is described above, but does not specifically teach using the regular expression to specify at least one address of an address pool. Peacock teaches using the regular expression to specify at least one address of an address pool, (e.g. col. 3, lines 19 – 40). It would have been obvious to one skilled in the art at the time of the invention to combine Peacock with Romanov because it is more efficient to have a regular expression to signify a pool of addresses then having multiple regular expressions for a pool of addresses. This could save space in address tables and time in packet switching.

31. Claim 12 is rejected for similar reasons as stated above.

***Response to Arguments***

Art Unit: 2143

32. Applicant's arguments with respect to claims 1 – 4 and 6 – 16 have been considered but are moot in view of the new ground(s) of rejection.

### *Conclusion*

33. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

34. a. Oppenheimer et al. U.S. Patent No. 5388213 discloses Method and apparatus for determining whether an alias is available to uniquely identify an entity in a communications system.

35. b. Ansell et al. U.S. Patent No. 6151631 discloses Territorial determination of remote computer location in a wide area network for conditional delivery of digitized products.

36. c. Andrews et al. U.S. Patent No. 5835723 discloses Dynamic assignment of multicast addresses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. England whose telephone number is 703-305-5333. The examiner can normally be reached on Mon-Thur, 7:00-5:00.

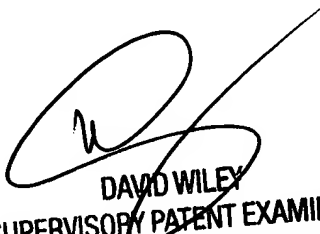
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 703-308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2143

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David E. England  
Examiner  
Art Unit 2143

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